From: Nancy L. Matthews [mailto:NMatthews@sierraresearch.com]

Sent: Thursday, December 23, 2004 1:42 PM

To: Dennis Jang; glong@baaqmd.gov

Cc: Gary Rubenstein; Nancy L. Matthews; Barbara McBride; Dana Petrin

Subject: Revised modeling analysis for 8-hour average CO emissions for Metcalf Energy Center

Dennis and Glen--

We looked again at the assumptions we had made for the modeling analysis of 8-hour startup impacts during cold steam turbine startups or commissioning activities and realized that we were being extremely conservative in overestimating emissions. The attached spreadsheet provides a much more realistic 8-hour turbine operating scenario. I have left the cell notes on the calculation of 8-hour averages so you can see the detailed assumptions. This calculation assumed that the first turbine is in cold startup or commissioning for the first 6 hours of the 8-hour period; after that, the second turbine has a warm start (since the warm start hourly emission rate, 902 lb/hr, is slightly higher than the cold start hourly emission rate of 838 lb/hr). This emissions scenario gives a max. 8-hour CO impact of 495 ug/m3, well below the PSD preconstruction monitoring threshold. Total emissions from the two turbines during the 8-hour period are 6,888 lb.

The modeling input and output files are attached. If you have any questions regarding this analysis, please don't hesitate to call Gary or me at 541-595-1918 or on Gary's cell phone, 916-802-1375.

Thank you, and Merry Christmas!